

Virginia Emergency Operations Center (VEOC)

Virginia Department of Emergency Management (VDEM)

DROUGHT AND BURN BAN SITUATION REPORT # 26 25 September 2008, 1600 Hours

New Information in Bold Italic Type

SUMMARY

Statewide precipitation for the previous water year (1 October 2006 through 30 September 2007) was below normal. Statewide precipitation for the period from October 1, 2006 through **September 18, 2008** was below normal. ***Statewide precipitation for the period from January 1, 2008 through September 18, 2008 was in the normal range; however, precipitation was below normal in the Big Sandy, New River, Upper James, Shenandoah, York-James, and Eastern Shore drought evaluation areas. Welcomed precipitation was received during the last month due to the passing of tropical systems Fay and Hanna, unfortunately the most drought stricken areas of western Virginia received very minor rainfall from these systems.*** Precipitation greater than 85% of normal is considered to be in the normal range.

EXECUTIVE ACTION

EOC Activation: The Virginia Emergency Operations Center is at Routine Operations.

State of Emergency: Governor Timothy M. Kaine declared a Statewide Emergency on 18 October 2007 and imposed a statewide ban on all open burning. The statewide ban on open burning was lifted by Governor Timothy M. Kaine on 15 November. The Statewide Emergency remains in effect to deal with potential or actual drought related issues.

Governor Kaine requested that the Secretary of the US Department of Agriculture declare Virginia a statewide disaster area due to reductions in farm production caused by drought and high temperatures in 2007. 93 counties and 34 independent cities received a Department of Agricultural Secretarial disaster designation in 2007 as primary natural disaster areas. York and Arlington counties and the independent cities of Alexandria, Bristol, Falls Church, Poquoson and Norton were named contiguous disaster areas.

Governor Kaine sent a letter to all localities dated 29 November 2007 advising them that the most effective water restrictions are those developed at the local level and asked that localities review their drought water conservation and contingency plans associated with public waterworks and if there was no current drought plan, one should be developed. Governor Kaine also asked localities to review their local ordinances requiring mandatory non-essential water use restrictions during declared emergencies and assure that the ordinances are consistent with the Virginia Drought Assessment and Response Plan and if the locality has not adopted such ordinances, they should consider the development and adoption of these. The potential for the Commonwealth to experience drought impacts this summer remains significant and a forum was held 2 June 2008, at the Library of Virginia to address water conservation and drought topics. DEQ – [COV Drought Response Plan](#)

Executive Order: [Executive Order 57 \(2007\)](#)

WEATHER FORECAST

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Coastal Flood Warning: Coastal Flood Warning in effect until 2000 hrs for Accomack and 2400 hrs for Gloucester, Mathews, York, Newport News, Hampton, Norfolk, Portsmouth, Northampton and VA Beach. **Coastal Flood Watch:** Coastal Flood Watch in effect for Northumberland, Lancaster and Middlesex from this evening, 25 September, through Friday afternoon, 26 September.

Thursday, 25 September: Cloudy during the day and overnight; 80% to 100% chance of showers across the Commonwealth throughout the day and overnight; daytime high temperatures low to upper 60's; overnight low temperatures upper 40's to mid 60's; north-northeast winds 15 to 25 MPH with gusts up to 45 MPH.

Friday, 26 September: Cloudy during the day becoming mostly cloudy overnight; 50-90% chance of showers across the Commonwealth throughout the day and overnight; daytime high temperatures low 60's to mid 70's; overnight low temperatures mid 50's to mid 60's; north-northeast winds 10 to 20 MPH with gusts up to 30 MPH.

OPERATIONS SECTION

ESF 1 – Transportation: Temporary waivers of registration and license requirements for carriers transporting emergency supplies of hay or animal feed expired on June 15, 2008

ESF 3 – Public Works & Engineering: Virginia Department of Health has not reported any impacts to public water supplies that have compromised their ability to provide the needs of their customers. ***51 systems have initiated water conservation measures; 5 have initiated mandatory water conservation requirements and 46 have initiated voluntary water conservation requirements. Water conservation requirements at public water supplies have decreased slightly since the last report when 46 systems were on voluntary restrictions and 9 systems required mandatory conservation.***

Waterworks are encouraged to develop water conservation and contingency plans and local governments are encouraged to adopt local water conservation ordinances. [DEQ Water Conservation Tips](#)

ESF 4 – Firefighting: ***The Virginia Department of Forestry reports very light fire activity over the last month due to precipitation related to the two topical systems. Since January 1, 2008, the VDOF has responded to 1,241 wildfires which burned 25,612 acres and damaged or destroyed 15 homes and 48 other structures. The large fire in the Dismal Swamp, which burned close to 5,000 acres is 100% contained.*** The most intense single day of wildfire activity in the preceding 70 years occurred on February 10, 2008. During this event wildfires driven by unusually high winds were reported in 62 localities across the Commonwealth. There were 357 reported fires that burned almost 14,000 acres, and damaged or destroyed 9 homes, 19 other structures and 7 vehicles. [VDOF Fire Summation Report 25 September 08](#)

ESF 5 – Emergency Management: VDEM posting event related items to WebEOC under event titled "WebEOC, 2007-10 Drought and Burn Ban"; Participating as member of the Drought Monitoring Task Force; assessing the impact across the Commonwealth; limited exemption of hours worked for hay and feed carriers expired 15 June 2008. VDEM Operations Director, Harry Colestock, and VDEM Recovery and Mitigation Director, George Roarty, attended a North Carolina Emergency Management Forum in Asheville, North Carolina, that discussed the drought in the Southeastern US.

- Virginia's plans and current efforts were discussed and included background of recent droughts, development of the Virginia Drought Assessment and Response Plan, current drought impacts, Governor's Emergency Declaration, resources in readiness, water system problems exacerbated by drought and potential funding and other resources to mitigate the impacts of the drought situation.

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ESF 11 – Agriculture and Natural Resources: Virginia Department of Agriculture and Consumer Services (VDACS) reports that according to the USDA Crop Weather Report ***released on September 15, 2008, only 24% of topsoil moisture ranged from short to very short. Recent rainfall in most areas of the state from tropical systems Fay and Hanna improved pasture and hay conditions around the state. The rainfall coupled with the cool nights has helped sustain many crops and pastures. However, staff reports that some areas of the state did not see significant rain from the recent storms, mainly the Emporia and Surry areas, and will likely have very poor crops this year.***

While the recent rainfall significantly improved crops and pastures, the lack of rain this summer has already impacted the agricultural community. As of September 22, 2008, nineteen localities have requested the Governor's assistance in obtaining federal disaster designation due to drought conditions. Those localities include: Amelia, Amherst, Bedford, Buckingham, Campbell, Caroline, Dinwiddie, Fluvanna, Goochland, Greene, Halifax, Lunenburg, Louisa, Nelson, Nottoway, Pittsylvania, Prince Edward, Scott, and Surry. The Cooperative Extension Service reports that as of September 18 Agricultural Extension agents in at least 30 counties have initiated efforts to have jurisdiction designated a disaster area due to drought conditions. The localities are in various stages of the process and include the nineteen localities that have already made formal requests. As a result of the hay shortages caused by the drought, the Virginia Tobacco Indemnification and Community Revitalization Commission has allocated \$500,000.00 to livestock producers in the Southwest Virginia counties of Bland, Buchanan, Carroll, Dickenson, Grayson, Lee, Scott, Smyth, Tazewell, Washington, Wise, and Wythe. All Virginia localities have access to federal drought disaster assistance. [VDACS Drought Related Information](#); [VDACS Hay Clearing House](#)

Virginia Department of Game and Inland Fisheries (DGIF) reports ***limited access at boat ramps on several rivers across the Commonwealth. Boaters are advised to check the Department's web site at www.huntfishva.com prior to going out and for specific information on individual boat access points. Spring flows that support operations at trout hatcheries remain fairly stable, however significant rainfall is needed prior to any fall stocking of trout. Fall hunting seasons are under way and hunters have been reminded to pay particular attention to fire safety in consideration of the dry conditions. If a significant rainfall event does not occur within the next 14 days it is anticipated that downstream flow variances will be requested for Smith Mountain Lake and Lake Moomaw. Fortunately water temperatures have been falling and the impact of reduced downstream flows will be mitigated by these lower temperatures. Cold water is capable of holding more oxygen and is less stressful to the aquatic community.***

Virginia Department of Environmental Quality (VDEQ) chairs the Virginia Drought Monitoring Task Force and reports ***the latest NOAA drought monitor indicates significant improvement in drought conditions in the Commonwealth since the last report. About one half of the Commonwealth is currently experiencing drought conditions that range from abnormally dry to severe drought. The western half of the Commonwealth as well as a narrow strip along the North Carolina border is currently experiencing these drought conditions.***

While drought monitoring ground water levels data is scarce, ***ground water levels are generally well below normal levels in areas west of Interstate 95 and in the southern Coastal Plain. Ground water levels are in the range of normal levels on the Eastern Shore, the northern Coastal Plain, the northern Shenandoah Valley, and northern Virginia. Twelve dedicated drought monitoring wells are at levels indicative of normal ground water levels, three are at levels indicative of moderate hydrologic drought (10th to 24th percentiles), and two are at levels indicative of severe hydrologic drought conditions (< 10th percentile) and three wells, two in the central area of the Coastal Plain and one in western Virginia, are at record low levels.***

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Water surface elevations of major reservoirs in eastern Virginia have largely recovered due to precipitation from tropical systems Fay and Hanna. Smith Mountain Lake remains 3.0 feet below full pond even though tropical systems resulted in a one foot increase in elevation and the fact that releases are being actively managed by stakeholders through a FERC approved variance to stem the declines in lake elevations. Philpott Lake has fallen 9 feet below the guide curve. The lake has a small drainage area and is used to make hydroelectric energy. Energy production is being transferred from Philpott to Kerr in order to recover the reservoir level. The two tropical systems raised elevations at Kerr Reservoir five feet and back to near the guide curve and is currently at 298.8. Lake Anna has returned to full pond as a result of rains from Hanna. One reservoir of major concern is Lake Moomaw on the Jackson River. It now has only 30% of its conservation storage remaining, having lost 21% in the past month. The project is releasing 196 cfs more than is flowing into the reservoir. The reservoir is seriously low for this time of year and may require action by the DEQ and the Corps of Engineers to reduce releases should the drought continue. Due to downstream water quality concerns it is preferable to maintain existing releases until the onset of cooler temperatures. In 2007 releases were reduced to 100cfs on November 1st when 20% of the conservation pool remained. It is likely that 20% of storage will remain in the conservation on October 1, 2008 (a full month earlier than 2007) and discussions with stakeholders will likely be required to determine when it will be possible to reduce releases while having a minimum impact on downstream water quality.

Levels of most large reservoirs have declined during the past month but most levels are in the range of expected mid-summer conditions. Smith Mountain Lake is 1.3 feet below full and falling slowly. Stakeholders have held four conference calls to consider release reductions; no action has yet been taken. Carvins Cove and Spring Hollow Reservoirs, the water supply for much of the Roanoke area, are at 82 and 80 per cent of useable storage capacity, respectively, which is adequate for this time of year. Philpott Lake has fallen 2.5 feet in the past month and is now 3.5 feet below the guide curve. The lake has a small drainage area and is used to make hydroelectric energy. Inflows are only 68% of the median inflow for July and even if the Corps of Engineers makes only the minimal amount of hydroelectric energy this lake will probably continue to fall significantly below the guide curve. Kerr Reservoir has fallen 0.75 feet so far this month and at 299 feet above sea level is only 0.5 feet below guide curve. The project is making the minimum amount of energy necessary to meet its contractual obligations, so releases are reduced and the project is falling slowly. The project will release extra water during the week of July 21 while conducting tests on a turbine. Lake Anna remains full and is currently only releasing water through its small hydroelectric turbine. The Lake Moomaw project on the Jackson River is 77% full, having fallen 16% in the past month. The project is releasing 180 cfs more than inflow into the reservoir. This low flow augmentation currently accounts for 13% of the flow of the James River at Richmond. The often vulnerable Rivanna Water and Sewer Authority system is 96% full.

US Geological Survey reports that stream gages throughout most of the Potomac, Rappahannock, York, lower James, Chowan, Big Sandy, and western Tennessee River Basins are recording streamflows in the normal range of flow based on September flow statistics. Stream gages in the upper Shenandoah, upper James, Roanoke, New, and eastern Tennessee River Basins are recording streamflows in the below normal to well below normal ranges of flow for September. The worst hydrologic drought conditions for the State are centered in the upper Roanoke Basin and extend along the Blue Ridge Physiographic Province from Harrisonburg VA to Bristol VA. This area received minimal precipitation from the last two tropical storms to pass through Virginia. Ground-water levels show similar drought conditions across the State with exceptions along the Atlantic Coast where the Suffolk well is recording water levels below normal while all other wells in southeast Virginia are recording well in the normal range. Both the surface-water and ground-water data mimic the U.S. Drought Monitor map. Shenandoah

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County cautioned its citizens to conserve well water since very little refill has occurred over the winter months.

[US Drought Monitor - VA: US Seasonal Drought Outlook: USGS Water Watch-Drought; Drought Monitoring Task Force Report 23 September 2008](#)

ESF 15 – External Affairs: Public Affairs Officers from VDEM, Department of Environmental Quality, Department of Forestry and Department of Health and representatives from VDH Office of Drinking Water developed and presented a comprehensive state communication plan to the Drought Monitoring Task Force and are incorporating recommendations into the plan, prior to submission for final approval.

PLANNING SECTION

Situation/Documentation Unit: Monitoring situation and issuing monthly situation reports. **Next Situation Report will be issued Thursday, 30 October 2008.**

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